CLAIMS

1.   A method of billing a variable bit rate communication between a first
terminal and a distant terminal to a subscriber, the method comprising

i) determining least cost alternative network resources available for achieving said
communication at a default quality of service and a required bit rate;

ii) determining cost data associated with said network resources; and

iii) outputting to said subscriber a least cost for said communication according to
said default quality of service and said least cost alternative network resources.

2.   The method of claim 1 further comprising coupling said first terminal
and said distant terminal via said least cost determined network resources and said default
quality of service at said required bit rate.

3.   The method of claim 2 further comprising billing for said call at said
default quality of service and according to said required bit rate after the termination of
the communication.

4.   The method of claim 1 further comprising

displaying a least cost route through a plurality of different networks, alternative
network paths having a different quality of service, alternative selectable required bit
rates and alternative costs;

receiving a subscriber request for one of a different quality of service, a different
required bit rate and a different alternative network path; and

repeating steps i) through iii) in accordance with said subscriber request..

5.   The method of claim 4 wherein said subscriber request comprises a
request for a different required bit rate during said communication.

6.   The method of claim 4 wherein said subscriber request comprises a request for a different quality of service.

7.   The method of claim 4 wherein said subscriber request comprises a request for a different network path.

8.   The method of claim 1 wherein said first terminal comprises means for capturing a visual image and said communication comprises an audio communication simultaneous with a visual communication.

9.   The method of claim 8 wherein said first terminal further comprises a display and a subscriber input and said method further comprises the steps of

displaying a least cost route through a plurality of networks alternative network paths having a different equality of service, alternative selectable required bit rates and alternative costs,

receiving a subscriber request for one of a different quality of service, different required bit rate and a different network path and

repeating steps i) and ii) in accordance with the subscriber request.

10.   The method of claim 9 wherein said subscriber request comprises a request for a different required bit rate during said communication.

11.   The method of claim 9 wherein said subscriber request comprises a request for a different quality of service during said communication.

12.   The method of claim 9 wherein said subscriber request comprises a request for a different network path.

13.   The method of claim 12 wherein said different network path comprises a selection of a heterogeneous network of two or more different ones of internet protocol networks, the public switched telephone network, asynchronous transfer mode networks and frame relay networks.

14.   A method comprising

billing a variable bit rate communication between a first terminal and a distant terminal to a broadband subscriber,

said billing comprising changing billing parameters during the communication in real time in response to user inputs including user-requested changes in preferred service provider.

15.   Apparatus for billing a communication among a circuit-switched network and a packet switched network comprising:

a first network server for one of said circuit-switched network or said packet switched network for forwarding data received from a broadband residential gateway to a central call station; receiving alternate route data consistent with a default quality of service data and a user-required bit rate from a second network server for the other of said circuit-switched network or packet switched network; routing said communication according to said alternate route; receiving one of different quality of service and required bit rate data input by a user during said communication; rerouting said communication in real time in response to said user input during said communication and communicating with an accounting gateway for billing said communication.

16.   The apparatus of claim 15 wherein said first network server comprises a least cost server having a processor for operating an optimized routing algorithm, said least cost server coupled to a router and an internet gateway.

17.   The apparatus of claim 15 wherein said first network server comprises an internet gateway having a processor for operating an optimized routing algorithm and said second network server comprises a gateway to a circuit switched network.